



Chapter 2 PLAN AND PLAT REVIEW PROCESS

2.1 Overall Sequence for Large Projects

The overall sequence of major development and redevelopment projects will generally follow the seven-step pattern shown in Figure 2-1. Very small projects, such as construction of a single residential house, may not need a concept plan or a rezoning application (Step 1). The plan review process is under the general control of three agencies, as a potential construction project becomes more specific in detail. At each step of the process, the principal agencies can answer questions and provide further guidance with a variety of information resources to assist the process. The start of any site development process is for the owner or his agent (developer, engineer, architect) to carefully read the zoning ordinance and zoning maps to discover the permissible land uses and any restrictions on the properties in question.

The Land Development Manual is mainly concerned with the portions of land development review under direct control of the Engineering Division which are shown as dashed boxes in Figure 2-1. The main type of regulation by the Stormwater Engineering Section is issuance of a site development permit after all design requirements have been met. No development, grading, excavation, trenching or other type of installation activity may occur at a project site if an approved site development permit is not obtained. The Knoxville Stormwater and Street Ordinance requires construction bonds to ensure constructed quality for public streets, sidewalks, drainage systems and detention basins. Construction bonds will be released when requirements for development certification are met.

Step 1: The Metropolitan Planning Commission (MPC) is responsible for comprehensive planning and property subdivision review in all of Knox County. MPC maintains a countywide zoning plan and separate zoning ordinances for the City of Knoxville and for Knox County. In addition, MPC provides expert guidance and recommendations to the Knoxville City Council and Knox County Commission. MPC reviews proposed zoning amendments, subdivision plans, conceptual plans, property plats, traffic impact studies, street names and addresses, and other documents that affect growth and development. MPC receives applications for zoning variances which are processed by the Knoxville Board of Zoning Appeals. See the MPC website at <http://www.knoxmpc.org/> for procedures, resources, online versions of Knoxville Zoning Ordinance and Minimum Subdivision Regulations, scheduled monthly MPC meetings, etc.

Step 2: The Stormwater Engineering Section has the primary role in development projects to review grading plans for street design, stormwater design, detention and stormwater quality facilities, erosion control, pavement sections, etc. The Stormwater Engineering Section also inspects construction projects for conformance with the approved site plans and plats. The Stormwater Engineering Section is responsible for the public stormwater system, such as managing stormwater infrastructure, investigating flooding problems, monitoring stormwater quality, analyzing stormwater models, and maintenance of the city streetlight system. Other sections of the Knoxville Engineering Division (Civil Engineering and Traffic Engineering) are responsible for the design of city streets & roads, sidewalks, greenways, traffic signals, etc. For more information, see the engineering website at <http://www.cityofknoxville.org/engineering/>



For step 2 (outdoor grading & site construction), there are streamlined procedures if the public welfare is not at stake with regard to public streets, driveway entrances, rights-of-way, property easements, stormwater drainage, detention basins, etc. Many simple development projects (such as building additions) do not require any grading, earthmoving, street connections, alteration of stormwater drainage systems, an increase in impervious area, or any type of land use to indicate a potential degradation of stormwater runoff. For these types of projects, streamlined review procedures are handled by Plans Review & Inspections in the course of reviewing building plans.

Step 3: The Plans Review & Inspections Section is part of the Knoxville Operations & Engineering Department. The primary functions are to review building plans and utilities connections, inspect buildings and utilities, check plans for compliance with building codes, etc. The main type of control for Plans Review & Inspection is the issuance of a building permit. In addition, a certificate of occupancy must be issued prior to the use of any new or remodeled buildings. Plans Review & Inspections also works closely with codes enforcement inspectors and fire inspections. The Knoxville Board of Zoning Appeals (BZA) can hear matters involving the interpretation or variance of a construction code. Many forms and instructions for obtaining permits from Plans Review & Inspections are posted at <http://www.ci.knoxville.tn.us/operations/>

Step 4: Final plats are submitted to MPC for a coordinated review by several agencies and eventual approval by MPC. The final plat will become the official property record and must be accurate and legally correct in every way. Each agency that reviews the final plat will sign a stamp placed on the plat for this purpose. The criteria for preparing a final plat are contained in Section 4 of the Knoxville / Knox County Minimum Subdivision Regulations. MPC sends a review copy of final plats to the Stormwater Engineering Section for checking conformance to the approved site plans as well as closure and accuracy requirements.

Step 5: Field inspections are conducted by the Stormwater Engineering Section and Plans Review & Inspections within their respective areas of responsibility. In both cases, construction quality will ensure public health and safety through building codes, proper utility inspections, traffic regulations and guidelines, adequate drainage, streetlights, etc. Construction quality is also inspected for any items that are accepted by the City of Knoxville, such as public streets, sidewalks, drainage systems, traffic signs and signals, streetlights, etc. Stormwater quality for creeks and streams, which is mandated by state and federal laws, is protected through the proper construction of detention basins, oil/water separators, or other stormwater quality structures.

Step 6: The Stormwater Engineering Section uses a development certification process in order to ensure that the constructed project meets the requirements of the approved plans and plats. A final site inspection is performed, all required material certifications are gathered, the detention basin is checked using the as-built configuration and outlet structure, easement locations are checked, and street geometry is checked. A final check of the as-built drawing with the recorded plat helps to ensure that official property documents are correct.

Step 7: Plans Review & Inspections conducts final inspection of all structures and buildings to ensure that all applicable building codes are met. Final utility inspections allow the safe use of electricity, natural gas and water within the constructed project. A certificate of occupancy is issued in order to allow structures and buildings to be used for the designated purposes.

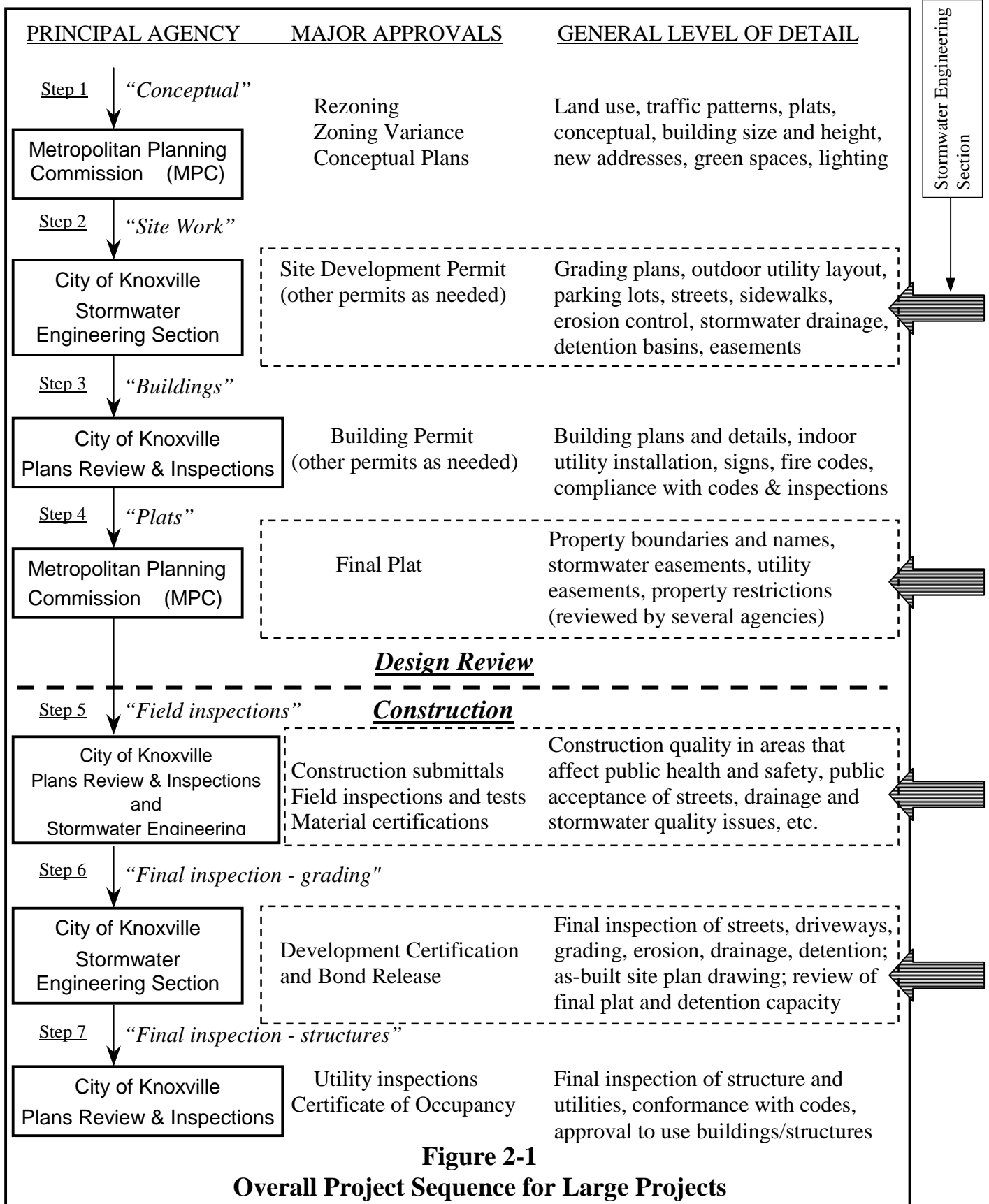


Figure 2-1
Overall Project Sequence for Large Projects



2.2 Site Development Permit Application

A site development permit may be obtained from either the Stormwater Engineering Section (Room 480, City County Building) or Knoxville Plans Review & Inspections (Room 505, City County Building) using the site development permit application and checklist in Appendix A. Obtain the permit from the Stormwater Engineering Section if either of these conditions apply:

- Grading is proposed, and there are no buildings or structures to be constructed. Typically these projects include parking lots, driveways and entrances, stormwater drainage improvements, street construction or other right-of-way improvements.
- A grading permit is desired prior to the final approval of a building permit. This allows outdoor portions of a project (grading, stormwater drainage installation, utilities, paving, parking lot, landscaping) to be constructed before the final design of a building is ready.

If there is only minimal grading and drainage construction required, the site development permit is typically obtained from Plans Review & Inspections in conjunction with the building permit. A site development permit application, if submitted to Plans Review & Inspections, is logged in electronically using the building permit application number as the reference number. The plans (with any supporting documents or calculations) are then routed to different reviewers. One copy of the plans, along with any supporting calculations, goes to the Stormwater Engineering Section for review of grading, stormwater drainage, erosion control, and detention basins. After all reviewers have reviewed the plans, Plans Review & Inspections will contact the appropriate party listed on the application with either approval/disapproval and a list of comments.

A site development permit application, when submitted to the Stormwater Engineering Section, is logged using a separate tracking system than Knoxville Plans Review & Inspections (which tracks all permits by cross-reference to a building permit application number). The plans are routed by the Stormwater Engineering Section to different reviewers. When review is complete, the Stormwater Engineering Section will fax/mail comments to the contact person listed.

A project must have an address assigned by MPC before site development plans can be accepted for review. Site development plans must meet the requirements of Chapter 7 and include a grading plan, erosion and sediment control plan, roadway alignment and profiles, construction details, etc. In addition to submitting the required number of site development plans and a site development permit application, other necessary information must also be included:

- Submittal review fees
- Stormwater calculations and detention calculations (if applicable)
- Retaining wall calculations (if applicable)
- Rezoning information or zoning variances (if applicable)
- Site development permit checklist (recommended but not required)

In some cases, a developer or engineer may wish to discuss a few aspects of a potential project prior to making an initial submittal. Contact the Stormwater Engineering Section front desk at 215-2148 to make an appointment with the plans reviewer or other city officials as needed. A predesign discussion may be performed as a courtesy to the design engineer, so that design efforts can be focused appropriately on a well-planned layout. However, a predesign discussion should be brief and to the point in order to conserve time and taxpayer dollars.



2.3 Site Development Flowcharts for Large Projects

In addition to the review process associated with the site development permit application, there are several other types of reviews and submittals that take place during and after the basic site development review. Figures 2-2 through 2-4 contain flowcharts of what happens after the site development permit application is reviewed and approved. This process typically takes much longer than the actual review of site plans, and may significantly affect the start of construction or the sale of a property. Therefore, it is extremely important that a potential developer must be familiar with the city review process and plan accordingly.

Figure 2-2: Site Development Review (stormwater covenant, construction bonds)

Figure 2-3: Plat Submittal Review (MPC, checking plats, recording plats)

Figure 2-4: Construction Inspections (types of inspections, bond release or extension)

Each of the flowcharts shows how a typical project is evaluated within the Stormwater Engineering Section after tentative site development approval has been obtained, with items shown as a diamond being the decision points. The top left portion of Figure 2-2 contains the basic plan review process. After the iterative review process is completed, the site plans are tentatively approved pending other actions.

Other documents (bonds, plats, covenants) are then prepared and reviewed for strict conformance with the approved plans. The remainder of Figure 2-2 shows the decision-making process in requiring construction bonds for street and/or drainage improvements. After the developer makes arrangements with a guarantor and provides the required information, a construction bond document (more correctly called a Performance and Indemnity Agreement) is prepared by the Stormwater Engineering Section secretary using a template as described in Policy 09 within Appendix C. In addition, a document called "Covenants for Permanent Maintenance of Stormwater Facilities" (CPMSF) is prepared by the Stormwater Engineering Section secretary for any detention basins and other stormwater quality structures using information provided by the property owner (see corresponding form in Appendix A) and the appropriate template (a basic template is included in Policy 02 within Appendix C).

Figure 2-3 deals primarily with the plat review process. This is coordinated by MPC and reviewed by several agencies, in order to ensure complete accuracy and legality. The Stormwater Engineering Section is responsible for looking at the surveying information and accuracy, in addition to agreement with the tentatively approved site plans. Plat review can be a long and arduous process if the plats are not prepared correctly. Final plats must conform to the Minimum Subdivision Regulations and must be approved by MPC before being recorded with the Knox County Register of Deeds.

Figure 2-4 gives an overview of the construction inspection process. Certain portions of the site development (street construction, sidewalks, stormwater drainage) must be inspected to ensure that the interests of the general public are protected. Construction of these items must be durable and low-maintenance. The method for reviewing and releasing construction bonds is also described.